BHURAT BENGALURU MAHANAGAR PALIKE

DASARAHALLI DIVISION

Name of the work : Modified Estimate for Providing and Laying PVC pipe line for water supply in Abbigere Medarahalli and K G Halli in ward No 12 shettyhalli Sub Division

Detail Estimation

Sl.No	Description of work	Unit	No	Measurements			Quantity	Rate	Amount
				Length	Width	Depth			
1	Geophysical investigation of site for sinking borewell for supply drinking water to the habitation either through the hand pump M.W.S or P.W.S.S by vertical electrical sounding by adopting venner or schlumberger's method including reconnaissance survey of geological formation Geophysical investigation of existing ground water infecundity its quality, quantity & acceptability of the user indicating the location of site recommended depth of casting pipe required to seal the top in consolidated formation including an extra depth of 1.00 Mtr in consolidated formation of proper scatting of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation technical personal and labour etc ,PRE-Bangalore Circle-2012-13, Page No-47, Item No-9.4	Each	1	1.00			1.00	3918.34	3918.34
2	Sinking borewell of 165 mm dia clear using super fast hydraulic Rig of capacity 250 PSIG and Above 900 CFM & above in all Strata including over burden upto 20 mtrs fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of Rig and Supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars and cap, etc., PRE- Bangalore Circle-2012-13, Page No-46, Item No-9.1 to 9.7							0.00	0.00
	0.00-50.00Mtrs	Mtr	1	50.00			50.00	360.85	18042.50
3	50.00-100.00Mtrs	Mtr	1	50.00			50.00	459.64	22982.00
4	100.00-150.00Mtrs	Mtr	1	50.00			50.00	474.19	23709.50
5	150.00-200.00Mtrs	Mtr	1	50.00			50.00	557.39	27869.50
6	200.00-250..00Mtrs	Mtr	1	50.00			50.00	659.30	32965.00
7	250.00-300.00Mtrs	Mtr	1	50.00			50.00	727.93	36396.50
8	250.00-350.00Mtrs	Mtr	1	50.00			50.00	857.92	42896.00
9	350.00-400.00Mtrs and above	Mtr	1	100.00					
	TOTAL Qty			100.00					
	Qty upto 125 % of TR			62.50			62.50	935.91	58494.38
	Qty Beyond 125 % of TR			37.50			37.50	935.91	35096.63
10	Providing and Fixing 250mm dia PVC pipe and as per Specification and Direction	Mtr	1	20.00			20.00	2291.31	45826.20
11	Supply of ISI mark 175mm nominal bore,plain end steel casing pipe- grade of steel Fee 410 of wall thickness 5.4 mm thick confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7 mts. Both ends threaded confirming to IS 554/1985, one end fixed with a socket confirming to IS 4270;2001 and the other end with screwed pipes.All pipes shall be reasonably free from defects. The tube shall be reasonably straight should be with ISI marking, weighing 25.10kg/mtr. (Inclusive of all taxes) (PRE SR-2012-13 page no.iii,item-84 (in Material Components)	Rmt	1	75.00			75.00	1377.87	103340.25
12	Providing 175 mm dia MS Collar (PREC SR-2012-13 page iii item86)	No	1	1.00			1.00	155.99	155.99

Sl.No	Description of work	Unit	No	Measurements			Quantity	Rate	Amount
				Length	Width	Depth			
13	Providing 175 mm dia MS Cap (PREC SR-2012-13 page iii item85)	No	1	1.00			1.00	103.99	103.99
14	Providing Supplying at site and Fixing Submersible pump sets suitable for borewell and confirming to IS 8034: 3phase with low volt motor as per specifications as per Necessary ammendments and instructions of Engineer in charge of work	No	1	1.00			1.00	81474.09	81474.09
15	Supplying and Laying jointing testing and Commissioning of GI Pipes confirming to IS 1239:1990 with latest amendments including fising collars Elbows tees bends glad clocks and other fittings with cuts and Theards whenever necessary including coveying the materials to workspot Class-C Heavy 50mm Dia	Rmt	1	400.00			400.00		
	TOTAL Qty			400.00					
	Qty upto 125 % of TR			375.00			375.00	481.47	180551.25
	Qty Beyond 125 % of TR			25.00			25.00	481.47	12036.75
16	Supplying and fixing 50 mm dia GI collar Heavy duty	No	1	60.00			60.00	187.18	11230.80
17	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A 3C X 6.05q mm Page No:12 Sl. No, 2.10.4 Electrical SR 2014-15	Rmt	1	810.00					
	TOTAL Qty			810.00					
	Qty upto 125 % of TR			775.00			775.00	213.18	165214.50
	Qty Beyond 125 % of TR			35.00			35.00	213.18	7461.30
18	Supply and Fixing 50mm dia GI Union with ISI mark	No	1	1.00			1.00	232.63	232.63
19	Supply and Fixing 50mm dia GI Union with ISI mark	No	1	3.00			3.00	108.46	325.38
20	Supply and delivery at site of brand new best make non - return valve as per IS 778/1984 with ISI mark and as per its latest amendments 50mm Dia	No	1	1.00			1.00	1221.88	1221.88
21	Supply and Fixing 50mm dia GI Elbow with ISI mark	No	1	3.00			3.00	116.26	348.78
22	Supply and Delivery at site of brand new star/Essen/Lotus/Sun-/Adarsh/G.K Controls Best Indigeonous make combined energy control panel board unit minimium mechanically strong tabe for operation on 3HP 50Hz 380/440 volts AC supply with loaded latch locking Device with the key out door panel board up to 3HP	No	1	1.00			1.00	21837.90	21837.90
23	Labour charges for Erection, Electrification and Commissioning of pump etcs, including aligning and balancing of all items icluding supply and erection of two pairs of supporting clamps bore wells caps cable clips and water tight gland cable of engineering icharges of work	Job	1	1.00			1.00	5875.44	5875.44
24	Labour charges for Erection, outdoor type panel board and meter board units with all necessary materials and lobour tools and equipments including providig cement concerete foundation bed etc.,	Job	1	1.00			1.00	1245.80	1245.80
25	Supplying of TPST with rewirable porcelain channels in SM enclosure. Made out of 14 SWG powder coated paint of approved colour.	No	1	1.00			1.00	1871.82	1871.82
26	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws.	No	1	1.00			1.00	303.65	303.65

Sl.No	Description of work	Unit	No	Measurements			Quantity	Rate	Amount
				Length	Width	Depth			
27	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 230/440v A.C. 50 Hz 12/24v D.C.	Mtr	1	1.00			1.00	447.96	447.96
28	Supplying, fixing and wiring heavy duty low voltage capacitors conforming to IS 2834. 3 phase, 400/440 volts grade, for power factor improvement of rotating machineries like induction motor.	Mtr	1	1.00			1.00	415.96	415.96
29	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross 3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.	LS	1	1.00			1.00	1783.43	1783.43
30	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	1	1.00			1.00	3119.39	3119.39
31	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.	Rmt	1	4.00			4.00	348.37	1393.48
32	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975	Rmt	1	50.00			50.00	155.99	7799.50
33	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)	Rmt	1	50.00			50.00	106.07	5303.50
34	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.	No,s	1	50.00			50.00	12.35	617.50
35	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.	No,s	1	3.00			3.00	280.77	842.31
36	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.	No,s	1	3.00			3.00	180.94	542.82
37	Cutting of Road surface for pipe line trenches and disposing of the excavated stuff as directed including barracading , Danger lighting etc.. In the Asphalt surface road (Item No :37.38	Cum	1	1083.10	0.75	0.15	121.85		
	TOTAL Qty			121.85					
	Qty upto 125 % of TR			6.75			6.75	563.63	3804.50
	Qty Beyond 125 % of TR			115.10			115.10	563.63	64872.79

Sl.No	Description of work	Unit	No	Measurements			Quantity	Rate	Amount
				Length	Width	Depth			
38	Cutting of Road surface for pipe line trenches and disposing of the excavated stuff as directed including barracading , Danger lighting etc.. In the Cement Concrete road (Item No :37.40	Cum	1	450.40	0.75	0.15	50.67		
	TOTAL Qty			50.67					
	Qty upto 125 % of TR			2.81			2.81	1150.13	3234.11
	Qty Beyond 125 % of TR			47.86			47.86	1150.13	55042.37
39	Earthwork Excavation for pipeline trenches including depositing on bank a lead of 50 mtrs and depth up to 2.00 mtrs Including shoring and danger lighting and using sight rails and boning rods at every mtrs in ordinary soil	Cum	1	4900.00	0.75	0.90	3307.50		
	TOTAL Qty			3307.50					
	Qty upto 125 % of TR			2541.38			2541.38	272.45	692197.62
	Qty Beyond 125 % of TR			766.13			766.13	272.45	208780.76
40	Providing and installing at site of work P V C pipes including cost of pipes and specials and labour including lowering into trenches laying to line level and perfect linking at joints leak proofing including jointing of approved type with all labour charges and all lift charges	Rmt	1	4969.00			4969.00		
	TOTAL Qty			4969.00					
	Qty upto 125 % of TR			4969.00			4969.00	161.18	800903.42
	Qty Beyond 125 % of TR			0.00			0.00	161.18	0.00
41	Refilling the basement and pipeline trenches with selected availabe earth from trench excavation including watering Consolidation in layers of 15 cm thick including disposing of the surplus earth with all lead & Lifts	Cum	1	4900.00	0.75	0.90	3307.50		
	TOTAL Qty			3307.50					
	Qty upto 125 % of TR			327.50			327.50	107.11	35078.53
	Qty Beyond 125 % of TR			2980.00			2980.00	107.11	319187.80
42	Supply and Delivery at site of brand new best make gate valve as per IS 778/1984 with ISI Mark and as per its latest amendments	Each	1	65.00			65.00		
	TOTAL Qty			65.00					
	Qty upto 125 % of TR			25.00			25.00	1237.48	30937.00
	Qty Beyond 125 % of TR			40.00			40.00	1237.48	49499.20
43	Bescom Charges	LS	1	1.00			1.00	19500.00	
								Sub Total	3228983.29
								Add Gst 12%	387477.99
								GRAND TOTAL	3616461.29

Certificate

1) The site has been inspected and found that the work is necessary
2) The provisions made in the estimate are adequate and are necessary
3) The work comes under the BBMP limits.
4) This Estimate is prepared as per PWD SR 2019-20 RDWS 2019-20 and BWSSB SR 2013-14 Eletrical - SR 2019-20

Assistant Engineer
Ward No 12

Assistant Executive Engineer
Shettyhalli Sub Division

Executive Engineer
Dasarahalli Division

Technically Sanctioned for Rs. 32.28 Lakhs
Rs. in words Rs. Thirty Two Lakhs
Under Pr 1802
Job Code No. 012-20-00116
Registered at Sl. No. 43/2021-22
to condition
No. KWSB/AE/JE/43/21-22 dt 10/2/2022
AE/JE